In re Patent Application of:
LEPPEK
Serial No. **09/827,386**
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In the Claims:

1. (CURRENTLY AMENDED) A method for controllably encrypting data to be transmitted over a communication path between a data source and a data recipient, comprising the steps of:

(a) providing ~~a plurality of respectively~~ at least three sequentially different data encryption operators to encrypt said data into an unintelligible form for transmission over said communication path;

(b) passing said data to be transported over said communication path through a first of said ~~respectively~~ sequentially different encryption operators that are arranged in a cascaded sequence to thereby produce a first encrypted data stream; and

(c) successively passing said first encrypted data stream through the cascaded sequence of said ~~respectively~~ sequentially different data encryption operators and successively accessing the at least three different sequentially different encryption operators and successively wrapping previously encrypted data with the next respective encryption operator until the last access code in an encryption control sequence is processed to thereby produce a multiple-encrypted output data stream that is an encryption of said first encrypted data stream.

2. (ORIGINAL) A method according to claim 1, further including the steps of:

(d) transporting said compound encrypted output data stream over said communication path to said data recipient; and

(e) passing said output data stream through a sequence of

second and first decryption operators that respectively decrypt data that has been encrypted by said second and first encryption operators, so as to recover said data.

3. (ORIGINAL) A method according to claim 1, wherein step (a) comprises storing said plurality of respectively different data encryption operators in an encryption operator database, and wherein step (b) comprises retrieving said first encryption operator from said database and passing said data to be transported over said communication path through said retrieved first encryption operator to thereby produce a first encrypted data stream, and step (c) comprises retrieving said second encryption operator from said database and passing said first encrypted data stream through said second encryption operator to thereby produce said compound encrypted output data stream.

4. (ORIGINAL) A method according to claim 1, further including the steps of:

(d) transporting said compound encrypted output data stream over said communication path to said data recipient; and

(e) passing said compound output data stream through a sequence of second and first decryption operators that respectively decrypt data that has been encrypted by said second and first encryption operators, so as to recover said data.

5. (ORIGINAL) A method according to claim 4, wherein step (e) comprises storing a plurality of respectively different data decryption operators in a decryption operator

database, retrieving from said decryption operator database second and first decryption operators that respectively decrypt data that has been encrypted by said second and first encryption operators, and passing said compound output data stream through a sequence of said second and first decryption operators so as to successively decrypt said compound output data stream and thereby recover said data.

6. (CURRENTLY AMENDED) A method for controllably encrypting data to be transmitted over a communication path between a data source and a data recipient, comprising the steps of:

(a) providing ~~a plurality of respectively~~ at least three sequentially different data encryption operators;

(b) ~~sequentially~~ successively passing data to be transported over said communication path through a cascaded sequence of said ~~respectively~~ sequentially different data encryption operators and successively accessing the at least three different sequentially different encryption operators and successively wrapping previously encrypted data with the next respective encryption operator until the last access code in an encryption control sequence is processed
to thereby produce a multiple-encrypted data stream.

7. (ORIGINAL) A method according to claim 6, further including the steps of:

(c) transporting said compound-encrypted data stream over said communication path to said data recipient; and

(d) passing said compound-encrypted data stream through a sequence of multiple decryption operators that sequentially

decrypt said compound-encrypted data so as to recover said data.

8. (CURRENTLY AMENDED) A method for controllably encrypting data to be transmitted over a communication path between a data source and a data recipient, comprising the steps of:

(a) storing ~~a plurality of respectively~~ at least three sequentially different data encryption operators in a data encryption operator database;

(b) retrieving from said database and assembling selected ones of said ~~respectively~~ sequentially different data encryption operators into a cascaded sequence of data encryption operators, wherein immediately successive ones of said data encryption operations of said sequence are different from one another; and

(c) successively passing data to be transported over said communication path through said cascaded sequence of data encryption operators generated in step (b), and successively accessing the at least three different sequentially different encryption operators and successively wrapping previously encrypted data with the next respective encryption operator until the last access code in an encryption control sequence is processed so as to produce a multiple-encrypted data stream.

9. (ORIGINAL) A method according to claim 8, further including the steps of:

(d) transporting said compound-encrypted data stream over said communication path to said data recipient;

(e) retrieving from a decryption operator database in

which a plurality of respectively different data decryption operators are stored, respective decryption operators that respectively decrypt data that has been encrypted by said selected encryption operators;

(f) passing said compound-encrypted output data stream through a sequence of decryption operators retrieved in step (e), successively decrypting said compound-encrypted data stream and thereby recover said data.

10. (CURRENTLY AMENDED) A method for controllably encrypting data to be transmitted over a communication path between a data source and a data recipient, comprising the steps of:

(a) providing ~~a plurality of respectively~~ at least three sequentially different data encryption operators;

(b) generating a cascaded sequence of data encryption operators comprised of plural ones of said ~~respectively~~ sequentially different data encryption operators provided in step (a); and

(c) successively passing data to be transported over said communication path through said cascaded sequence of data encryption operators generated in step (b), and successively accessing the at least three different sequentially different encryption operators and successively wrapping previously encrypted data with the next respective encryption operator until the last access code in an encryption control sequence is processed so as to produce a multiple-encrypted output data stream.

11. (ORIGINAL) A method according to claim 10, further including the steps of:

(d) transporting said compound-encrypted output data stream over said communication path to said data recipient; and

(e) passing said compound-encrypted output data stream through a sequence of decryption operators that respectively decrypt data that has been encrypted by said data encryption operators, so as to recover said data.

Claims 12-15 (CANCELLED)